

PRELIMINARY TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

1. Cable construction

Cable type	A-DSQ(ZN)(SR)2Y-(2-5)x12-250-652D/657A1+Cu2Y 1x2x0.64-2040		
Cable construction <ol style="list-style-type: none"> 1. Outer sheath: UV-resistant PE 2. Tape armor: Corrugated steel tape 3. Optical loose tube: 2,3mm PBT Tube 4. Intramodule compound: Thixotropic compound 5. Optical Fiber: Single-mode Fiber according to ITU-T G.652.D and G.657.A1 6. Rip-cord: Synthetic yarn 7. Central strength element: Glass reinforced plastic 2,3mm FRP-E 8. Water-blocking element of core: Water-swellable yarn 9. Twisted pair: 2x0,64 mm Cu with PE insulation 			
Temperature ranges	Storage and transportation temperature	Installation temperature	Operating temperature
	from -30 to +70 °C	from -10 to +50 °C	from -20 to +60 °C
Resistance to water penetration	Water resistant		
Relative humidity at +35° C, %	98		
Outer diameter, mm	11,3±0,2		
Average weight of 1 km of the cable, kg	123±5%		

2. Mechanical characteristics

Calculated tensile strength, not less than ¹ , kN	
Dynamic	3,5
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,25 (2500)
Resistance to axial torsion at angle ±180° on 2 m length cable	Resistant
Resistance to bends at angle ± 90° with a radius equal to 20 nominal cable diameters	Resistant
Resistance to impact 15 J	Resistant

¹ Tensile strength value is for maximum number of fibers design

3. Electrical characteristics

Test voltage conductor-conductor, V	1000
Maximum operation voltage, V	250
Nominal capacitance between conductors, nF/km	50±5
Nominal conductor DC resistance at 20°C, Ohms/km	65±4

4. Packaging and marking

Cable factory length, km	6
Package	Drum №14g (1401x1013x1401)
Tolerance, %	±3,0
Short lengths (customer approval)	Maximum 5%
Marking method	Inkjet printing
The accuracy of marking, %	±0,5

5. Coloring

Coloring of fibers in loose tube (According to Customer's requirements color can be different).

1	2	3	4	5	6	7	8	9	10	11	12
red	green	blue	yellow	white	slate	brown	violet	aqua	black	orange	pink

Coloring of optical loose tube (According to Customer's requirements color can be different). Core-filler color is natural.

1	2	3	4	5	6
red	green	blue	yellow	white	slate

Coloring wires in a twisted pair (According to Customer's requirements color can be different)

1	2
white	blue

6. Product data

Fiber count	24	48	60
Loose tubes x fibers	2x12	4x12	5x12